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10/725,643	12/02/2003	Norman Goris	N, GORIS 7-7	4532

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EXAMINER	
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ART UNIT	PAPER NUMBER
2419	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/725,643	GORIS ET AL.	
	Examiner	Art Unit	
	SORI A. AGA	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 October 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 1,11 and 21 recite "a real time calculation …that is unique to each data transfer". The specification fails to provide support for a real time calculation and a data communication parameter that is unique to each data transfer. Therefore, the claim limitations constitute new matter. Claims 2-10, 12-20, 22 and 23 depend on claims 1, 11 and 21 respectively and fail to resolve the deficiencies therein.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Independent claims 1, 11, and 21 recite "real-time calculation". The term "real-time" in claims 1, 11 and 21 is a relative term which renders the claim indefinite. The term "real-time" is not defined by the claim, the specification does not provide a standard for ascertaining the

requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear what constitutes real-time calculation.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1, 2, 5, 6, 8-12, 15,16 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yahagi (US 20020102978 A1) (herein after Yahagi) in view of Trompower et al. (US 6,138,019) (herein after Trompower) and Coombes (US 2004/0203959 A1) (herein after Coombes).

Regarding claim 1, Yahagi teaches a system for selecting one of at least two different candidate communication networks for data communication by a mobile communication device, comprising: a network selector that: employs said mobile communication device to perform a data transfer between said mobile communication device and a communication server associated with each of said at least two different candidate communication networks **[see figure 6 and paragraph 0038 lines 10-17 where a controller-44 (network selector) directs the wireless interface-41 (mobile communication device) to send a request signal (data communication) to a controller within a communication center-50 (communication server) associated with three candidate networks ('21', '22' and '23' fig. 6)];** and performs an evaluation of said at least two different candidate communication networks based on at least one data communication quality parameter **[see paragraph 0026 lines 1-12 where the**

network selection is made based on detecting and monitoring (evaluating) traffic congestion and cost (quality parameter) associated with each network].

However, Yahagi does not explicitly teach the parameter is determined by a real-time calculation of a time needed for each data transfer that is unique to each data transfer. However Trompower teaches a host computer that calculates an average delay time that is calculated by computing time delay t_{delay} (communication quality parameter) associated with a particular test packet (unique to each data transfer) based on EACH response packet and then sends another test packet, receives response and repeats the cycle (real-time calculation) **[see column 22 lines 57-62 and column 23 lines 9-15–see also figure 12C].** It would have been obvious for a person having ordinary skill in the art to determine a communication quality parameter (t_{delay}) by a real-time calculation of a time needed for each data transfer that is unique to each data transfer. This is desirable because it can allow the user terminal of Yahagi build a time delay table which can be used to more precisely analyze delay time by breaking down delay time caused by processing delays within the server due to generating the response packet which are separate from the actual time delays which occur for communications between the user terminal and the server.

However, Yahagi does not explicitly teach said calculating is performed by said mobile communication device. However, Coombes in the same field of endeavor teaches average fetch response is measured and updated (calculated) in a pro-fetch controller found within a mobile communication device **[see paragraph 0035 lines 17 and 22-23; see also fig. 4 '404']**. Therefore, it would have been obvious at the time of the invention to enable the

mobile communication device of Yahagi to calculate average fetch response in order to enable said device determine if the candidate networks meet certain Quality Of Service requirements.

Regarding claim 2, Yahagi teaches the system as recited in Claim 1 wherein said network selection subsystem causes said wireless communication device to employ one of said at least two different candidate wireless communication networks based upon an outcome of said evaluation **[see paragraph 0025 lines 11-12 where the controller-22 (wireless communication device) directs the wireless interface-21 to establish a connection to the selected network]**.

Regarding claim 5, Yahagi teaches the system as recited in Claim 1 wherein said mobile communication device is selected from the group consisting of: a mobile telephone, a personal digital assistant (PDA), and a mobile digital assistant (MDA) **[see paragraph 0024 line 5 where Yahagi teaches the mobile communication device is a mobile terminal of a cellular phone networks]**.

Regarding claim 6, Yahagi teaches the system as recited in Claim 1 as discussed above. However, Yahagi does not explicitly teach said at least one data communication quality parameter includes a time to perform said data transfer.

However Trompower teaches a host computer that calculates an average delay time that is calculated by computing time delay t_{delay} (communication quality parameter) associated with a particular test packet **[see column 22 lines 57-62 and column 23 lines 9-15–see also figure 12C]**. It would have been obvious for a person having ordinary skill in the art to determine a communication quality parameter -t_{delay}(time to perform data transfer). This is desirable because it can allow the user terminal of Yahagi build a time delay table which can be used to more precisely analyze delay time by breaking down delay time caused by processing delays within the server due to generating the response packet which are separate from the actual time delays which occur for communications between the user terminal and the server.

Regarding claim 8, Yahagi teaches the system as recited in Claim 1 wherein said network selector employs a display of said mobile communication device to notify a user of an outcome of said evaluation **[see paragraph 0025 lines 8-11 where a user interface including a display and an annunciator for indicating a congestion level detected by a traffic monitor]**.

Regarding claim 9, Yahagi teaches the system as recited in Claim 1 wherein said network selector takes charge rates associated with said at least two different candidate wireless communication networks into account in performing said evaluation **[see paragraph 0026 line 8 where tariff data is taken into account for evaluating the**

networks].

Regarding claim 10, the system as recited in Claim 1 wherein said network selector automatically performs said data transfers and evaluation **[see paragraph 0005 lines 3-5 where a multi-network environment allowing the user to receive service without making a manual switchover (automatic) from one network to another].**

Regarding claim 11, Yahagi teaches a method of selecting one of at least two different candidate communication networks for data communication by a mobile communication device, comprising:
performing a data transfer between said mobile communication device and a communication server associated with each of said at least two different candidate communication networks **[see figure 6 and paragraph 0038 lines 10-17 where a controller-44 (network selector) directs the wireless interface-41 (mobile communication device) to send a request signal (data communication) to a controller within a communication center-50 (communication server) associated with three candidate networks-'21', '22' and '23' (candidate networks)]**;
and performing an evaluation of said at least two different candidate communication networks based on at least one data communication quality parameter **[see paragraph 0026 lines 1-12 where the network selection is made based on detecting and monitoring (evaluating) traffic congestion and cost (quality parameter) associated with each network].**

However, Yahagi does not explicitly teach the parameter is determined by a real-time calculation of a time needed for each data transfer that is unique to each data transfer. However Trompower teaches a host computer that calculates an average delay time that is calculated by computing time delay t_{delay} (communication quality parameter) associated with a particular test packet (unique to each data transfer) based on EACH response packet and then sends another test packet, receives response and repeats the cycle (real-time calculation) **[see column 22 lines 57-62 and column 23 lines 9-15–see also figure 12C].** It would have been obvious for a person having ordinary skill in the art to determine a communication quality parameter (t_{delay}) by a real-time calculation of a time needed for each data transfer that is unique to each data transfer. This is desirable because it can allow the user terminal of Yahagi build a time delay table which can be used to more precisely analyze delay time by breaking down delay time caused by processing delays within the server due to generating the response packet which are separate from the actual time delays which occur for communications between the user terminal and the server.

However, Yahagi does not explicitly teach said calculating is performed by said mobile communication device. However, Coombes in the same field of endeavor teaches average fetch response is measured and updated (calculated) in a pro-fetch controller found within a mobile communication device **[see paragraph 0035 lines 17 and 22-23; see also fig. 4 '404']**. Therefore, it would have been obvious at the time of the invention to enable the mobile communication device of Yahagi to calculate average fetch response in order to enable said device determine if the candidate networks meet certain Quality Of Service

requirements.

Regarding claim 12, Yahagi teaches the method as recited in Claim 11 further comprising causing said wireless communication device to employ one of said at least two different candidate wireless communication networks based upon an outcome of said evaluation **[see paragraph 0025 lines 11-12 where the controller-22 (wireless communication device) directs the wireless interface-21 to establish a connection to the selected network]**.

Regarding claim 15, Yahagi teaches the method as recited in Claim 11 wherein said mobile communication device is selected from the group consisting of: a mobile telephone, a personal digital assistant (PDA), and a mobile digital assistant (MDA) **[see paragraph 0024 line 5 where Yahagi teaches the mobile communication device is a mobile terminal of a cellular phone networks]**.

Regarding claim 16, Yahagi teaches the method as recited in Claim 11 as discussed above. However, Yahagi does not explicitly teach said at least one data communication quality parameter includes a time to perform said data transfer.
However Trompower teaches a host computer that calculates an average delay time that is calculated by computing time delay t_{delay} (communication quality parameter) associated with a particular test packet **[see column 22 lines 57-62 and column 23 lines 9-15–see also figure 12C]**. It would have been obvious for a person having ordinary skill in the art

to determine a communication quality parameter -t_{delay}(time to perform data transfer). This is desirable because it can allow the user terminal of Yahagi build a time delay table which can be used to more precisely analyze delay time by breaking down delay time caused by processing delays within the server due to generating the response packet which are separate from the actual time delays which occur for communications between the user terminal and the server.

Regarding claim 18, Yahagi teaches the method as recited in Claim 11 further comprising employing a display of said mobile communication device to notify a user of an outcome of said evaluation **[see paragraph 0025 lines 8-11 where a user interface including a display and an annunciator for indicating a congestion level detected by a traffic monitor]**.

Regarding claim 19, Yahagi teaches the method as recited in Claim 11 further taking charge rates associated with said at least two different candidate wireless communication networks into account in performing said evaluation **[see paragraph 0026 line 8 where tariff data is taken into account for evaluating the networks].**

Regarding claim 20, Yahagi teaches the method as recited in Claim 11 further comprising automatically performing said data transfers and evaluation **[see paragraph 0005 lines 3-5 where a multi-network environment allowing the user to receive**

service without making a manual switchover (automatic) from one network to another].

Regarding claim 21, Yahagi teaches a mobile communication device, comprising: a keypad; a display; and a network selector, associated with said keypad and said display **[see paragraph 0025 lines 8-11; where a User interface-23 including a display and an annunciator for indicating the received response signal to permit the user to select a desired network and enter a command signal are shown]**, that employs said mobile communication device to perform a data transfer between said mobile communication device and a communication server associated with each of said at least two different candidate communication networks **[see figure 6 and paragraph 0038 lines 10-17 where a controller-44 (network selector) directs the wireless interface-41 (mobile communication device) to send a request signal (data communication) to a controller within a communication center-50 (communication server) associated with three candidate networks ('21', '22' and '23' fig. 6)]**; and performs an evaluation of said at least two different candidate communication networks based on at least one data communication quality parameter **[see paragraph 0026 lines 1-12 where the network selection is made based on detecting and monitoring (evaluating) traffic congestion and cost (quality parameter) associated with each network].** However, Yahagi does not explicitly teach the parameter is determined by a real-time calculation of a time needed for each data transfer that is unique to each data transfer. However Trompower teaches a host computer that calculates an average delay time that

is calculated by computing time delay t_{delay} (communication quality parameter) associated with a particular test packet (unique to each data transfer) based on EACH response packet and then sends another test packet, receives response and repeats the cycle (real-time calculation) **[see column 22 lines 57-62 and column 23 lines 9-15–see also figure 12C].** It would have been obvious for a person having ordinary skill in the art to determine a communication quality parameter (t_{delay}) by a real-time calculation of a time needed for each data transfer that is unique to each data transfer. This is desirable because it can allow the user terminal of Yahagi build a time delay table which can be used to more precisely analyze delay time by breaking down delay time caused by processing delays within the server due to generating the response packet which are separate from the actual time delays which occur for communications between the user terminal and the server.

However, Yahagi does not explicitly teach said calculating is performed by said mobile communication device. However, Coombes in the same field of endeavor teaches average fetch response is measured and updated (calculated) in a pro-fetch controller found within a mobile communication device **[see paragraph 0035 lines 17 and 22-23; see also fig. 4 '404']**. Therefore, it would have been obvious at the time of the invention to enable the mobile communication device of Yahagi to calculate average fetch response in order to enable said device determine if the candidate networks meet certain Quality Of Service requirements.

Regarding claim 22, Yahagi teaches the mobile communication device as recited in Claim 21 wherein said mobile communication device is selected from the group consisting of: a mobile telephone, a personal digital assistant (PDA), and a mobile digital assistant (MDA) **[see paragraph 0024 line 5 where Yahagi teaches the mobile communication device is a mobile terminal of a cellular phone networks]**

Regarding claim 23, Yahagi teaches the mobile communication device as recited in Claim 21 wherein said network selector employs said display to notify a user of an outcome of said evaluation **[see paragraph 0025 lines 8-11 where a user interface including a display and an annunciator for indicating a congestion level detected by a traffic monitor to the user]**.

8. Claims 3,4,13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yahagi, Trompower and Coombes as applied to claims 1, 2, 5, 6, 8-12, 15,16 and 18-23 above and further in view of Guilford et al. (US 20020087674 A1) (herein after Guilford).

Regarding claim 3, Yahagi teaches the system as recited in Claim 1 as discussed above. Yahagi does not explicitly teach said at least two different candidate wireless networks comprise GSM and UMTS. However, Guilford in the same field of endeavor as Yahagi teaches that candidate networks can be GSM or UMTS **[0014 lines 8-10]**. It would have been obvious at the time of the invention to make Yahagi's device compatible with said

standards in order to have devices that are commercially appealable in view of the fact that said standards are widely used in the Industry.

Regarding claim 4, Yahagi teaches the system of claim 1 as discussed above. However, Yahagi does not explicitly teach said networks conform to a standard selected from the group consisting of GPRS, HSCSD or EDGE standards. However, Guilford teaches the candidate networks may employ different technologies such as GPRS or EDGE. **[see 0027 line 2 and 0087 line 4]**. It would have been obvious at the time of the invention to make Yahagi's device compatible with said standards in order to have devices that are commercially appealable in view of the fact that said standards are widely used in the Industry.

Regarding claim 13, Yahagi teaches the method as recited in Claim 11 as discussed Yahagi does not explicitly teach said at least two different candidate wireless networks comprise GSM and UMTS. However, Guilford in the same field of endeavor as Yahagi teaches that candidate networks can be GSM or UMTS **[0014 lines 8-10]**. It would have been obvious at the time of the invention to make Yahagi's device compatible with said standards in order to have devices that are commercially appealable in view of the fact that said standards are widely used in the Industry.

Regarding claim 14, Yahagi teaches the method as recited in Claim 11 as discussed above. However, Yahagi does not explicitly teach said networks conform to a standard selected from the group consisting of GPRS, HSCSD or EDGE standards. However,

Guilford teaches the candidate networks may employ different technologies such as GPRS or EDGE. **[see paragraph 0027 line 2 and 0087 line 4]**. It would have been obvious at the time of the invention to make Yahagi's device compatible with said standards in order to have devices that are commercially appealable in view of the fact that said standards are widely used in the Industry.

9. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yahagi, Trompower and Coombes as applied to claims 1, 2, 5, 6, 8-12, 15,16 and 18-23 above, and further in view of Michaelis et al. (US 20040009751 A1) (herein after Michaelis).

Regarding claim 7, Yahagi teaches the system as recited in Claim 1 as discussed above. However, Yahagi does not explicitly teach communication drops as a quality parameter of communication quality. However, Michaelis teaches lowering the candidate status of a network based on losing of a connection (dropping) **[see paragraph 0045 line 6].** Therefore, it would have been obvious at the time of the invention to add droppings as a parameter for selecting networks in order minimize the selection of networks with higher probability of droppings as a serving network.

Regarding claim 17, Yahagi teaches the method as recited in Claim 11 as discussed above. However, Yahagi does not explicitly teach communication drops as a quality parameter of communication quality. However, Michaelis teaches lowering the candidate status of a network based on losing of a connection (dropping) **[see paragraph 0045 line**

6]. Therefore, it would have been obvious at the time of the invention to add droppings as a parameter for selecting networks in order minimize the selection of networks with higher probability of droppings as a serving network.

Response to Arguments

10. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SORI A. AGA whose telephone number is (571)270-1868. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571)272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. A. A./
Examiner, Art Unit 2419
/DANG T TON/
Supervisory Patent Examiner, Art Unit 2419/D. T. T./
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